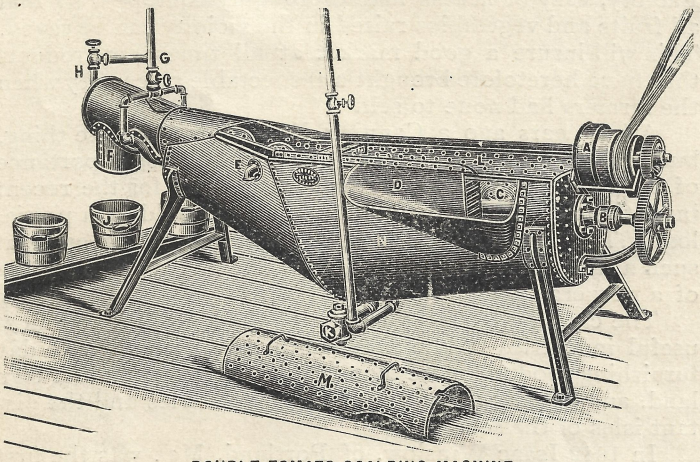
THE AGE OF PROGRESS

THE OLD YIELDS TO THE NEW

Improvements Follow Each Other in Quick Succession



DOUBLE TOMATO SCALDING MACHINE

THOSE WHO THINK AND ACT ARE THE ONES WHO SUCCEED

Hard labor cannot compete with scientific appliances, and success in business depends on the degree of intelligence used.

A glance at the different occupations, to-day followed by our people, makes it apparent that in no industry has more hard work been done for the limited, though certain, return than in farming.

Inventions have made farming much easier than formerly, but even now farmers do not get fair returns for their labor, yet he who works his brain and hand at the same time accomplishes more than he who uses either one separately.

The farmer is interested in getting the greatest returns from his land, with the least possible labor and expense, and at the same time keep in view the necessity of constantly adding to the value of his land.

It has been practically demonstrated in older countries that in most instances it is not the largest acreage that pays best, but the largest and most valuable yield per acre, and this question interests all of us, how shall we decrease our physical work, and at the same time increase our returns?

WHAT FARMERS NEED

What every farming community in the central part of the United States should have, is a modern Canning Factory, easy of access and thoroughly equipped, so that all fruits and vegetables raised in the vicinity can be saved. This will insure a good market at all times for products that have heretofore brought a respectable price only when the farmers had none to sell.

A few years ago a Canning Factory was a rare thing, but lately have the people awakened to the vast importance of saving what they raise and which, but for the recent inventions in the art of canning goods, would be a partial loss. The demand for Canning Factories is increasing at such a rapid rate that we may well imagine it the dawning of a new era.

The canning business is one of the grandest and most useful industries of the nineteenth century, and is to-day furnishing food for more than 60,000,000 people in our own land, and equally as many in foreign countries and the distant isles of the sea.

In 1842 Isaac Winslow, of Portland, Me., was the first to pack sugar corn in hermetically sealed cans for sale, and in 1863 he obtained a patent from the United States for his invention. It may be well to state here that Louis McMurray (lately deceased) operated the largest corn factory in the world. His factory is located in Maryland and has a daily capacity of 150,000 cans. If the father of canned goods could arise from his slumber, like Barbarossa in the well known legend, and could witness the improvement on his crude method, he would doubtless exclaim, "What wonderful progress man has made!"

CAN THE BUSINESS BE OVERDONE

No, not in the near future; and the following are reasons for thinking so:

Our home demand is increasing at the rate of 72 per cent. yearly. It has come to be a necessity, and we now find canned goods on almost every table in the land. Its convenience recommends it, and its superior merit must ever keep it in demand. It is the most practical and, in fact, the only way much of our produce can be sent to for-

eign countries, and our export trade alone is increasing so rapidly that with our present facilities we will have trouble in supplying it.

Our foreign demand of 1891 over 1890 was 32 per cent.; 1892 over 1891 39 per cent.; 1893 over 1892 49 per cent.; and 1894 over 1893 still a greater per cent.

The improved machinery for putting up these goods so diminishes the cost, and so greatly improves the quality, that private families have long since learned that to buy their goods from first-class factories is cheaper and far more pleasant than working over stoves in the hot season.

There are only certain localities in the United States where both soil and climate are adapted to this industry; the extreme north is too cold, and in the extreme south the season is generally very hot—the sandy soil of the south not retaining the moisture necessary to make raising of certain vegetables profitable.

Then everyone who embarks in this enterprise does not make a success; namely, for want of improved machinery, experience, good judgment and attention. We could give many more reasons, showing that the business of canning fruits and vegetables will not for the next twenty-five years equal the demand, to say nothing about an over-production.

WILL A CANNING FACTORY PAY

If it will, there is no reason why every farming community should not have one.

A good factory should take almost everything grown on the farm. Let us now figure on one acre of tomatoes, which are more generally used than any other article canned. One acre of good ground well tended, with an ordinary season, will yield from 300 to 500 bushels—say 400 at 20 cents per bushel will bring $80.00. Without going into details as to expense of plowing, harrowing, etc., we will claim $30.00 for expense per acre, which leaves a clear profit of $50.00 for one acre, or the nice round sum of $5,000 for 100 acres, enough to buy another farm, as it will apply to 100 acres as well as one.

Corn will yield from 3 to 5 tons per acre in the husk. The price per ton is from $6.00 to $8.00. Peas will pay from $70.00 to $80.00 per acre; string beans from $50.00 to $60.00 per acre.

It will readily be seen how much more valuable such crops are than the ones our farmers ordinarily raise.

SOME FIGURES

These tables, from the American Grocer, a leading authority in the canned goods business, will be interesting, as they show an increasing price in spite of the fact that more factories are built and more goods canned every year, and clearly show that the demand is increasing faster than the production.

The following table gives the highest and lowest price for standard grade tomatoes, No. 3 tins, in the New York market for eight years:

Year.	Lowest.	Highest.
1893	95	1 45
1892	82½	1 00
1891	80	85
1890	77½	1 00
1889	81½	88
1888	90	1 05
1887	95	1 10
1886	88½	1 15

The following table brings into comparison the price of No. 3 standard tomatoes in Philadelphia, on Jan. 1, each year for the past few years:

1894	1 00
1893	95
1892	75@ 90
1891	75@ 80

IMPROVES THE LAND

Then another thing—we make bold the assertion, fearless of suceessful contradiction, that you may take an acre of old, worn-out land, plant and cultivate and raise three consecutive crops of tomatoes, and you will have brought the soil back almost to its virgin purity and richness, and at the same time kept your land from washing. Tomatoes are planted and cultivated similarly to corn; there is no extra expense to commence it; your same team and ordinary farming implements are all you need. When ripe they are generally picked and gathered by the children, then hauled to factory, weighed and paid for.

DIVERSIFIED FARMING

We could enumerate every article that is canned, showing you that this line of farming will pay you far better than any other way you can use your land. You will have less work and can take many more hours of ease and enjoyment with your families, the latter being, by too many, sadly neglected and often lost sight of. Why not come to the front and be a community of thrift and progress, and not continue in the same routine that was practiced 400 years ago by your forefathers? Time waits for no one; every man carves out his own destiny, and the time has come when it rests with you, and you alone, to better your condition, and it can be done only by your own personal efforts. Diversify your crops and build factories, thereby bringing in more people who will want homes. Make a start, and make it now. Your community will blossom with thrift and prosperity.

To illustrate the many changes that have taken place in the past few years, showing the importance of diversifying the crops of our country, we make the following

statement, and do so authoritatively: There are more than one-half million almond trees being grown in the United States. There are hundreds of thousands of bearing cocoanut trees. There are more than one-fourth million olive trees, producing fruit equal to the best Mediterranean varieties. There are more than one-half million bearing banana plants, two hundred thousand bearing lemon trees, four million orange trees, and twenty-one million pineapples. These, because experience has shown that something must be grown with more profit in it than wheat.

IT WILL BENEFIT EVERYBODY

A canning factory will give your teamsters work; your carpenters will have no more idle days, and the blacksmith will be busy; the laborers of your vicinity will find employment at their own doors, whether skilled or unskilled, from the aged man and woman down to the little boy and girl from 10 to 12 years of age.

Your land will not only improve in richness and hence in value, but will yield you twice as much each year. Its rental value will increase $3.00 to $5.00 per acre. A renter can better afford to pay from $10.00 to $15.00 per acre for good ground near a canning factory than to have it furnished him for nothing and follow ordinary farming, as a few acres planted in sweet corn, tomatoes and berries for a canning factory will pay better than a whole farm otherwise.

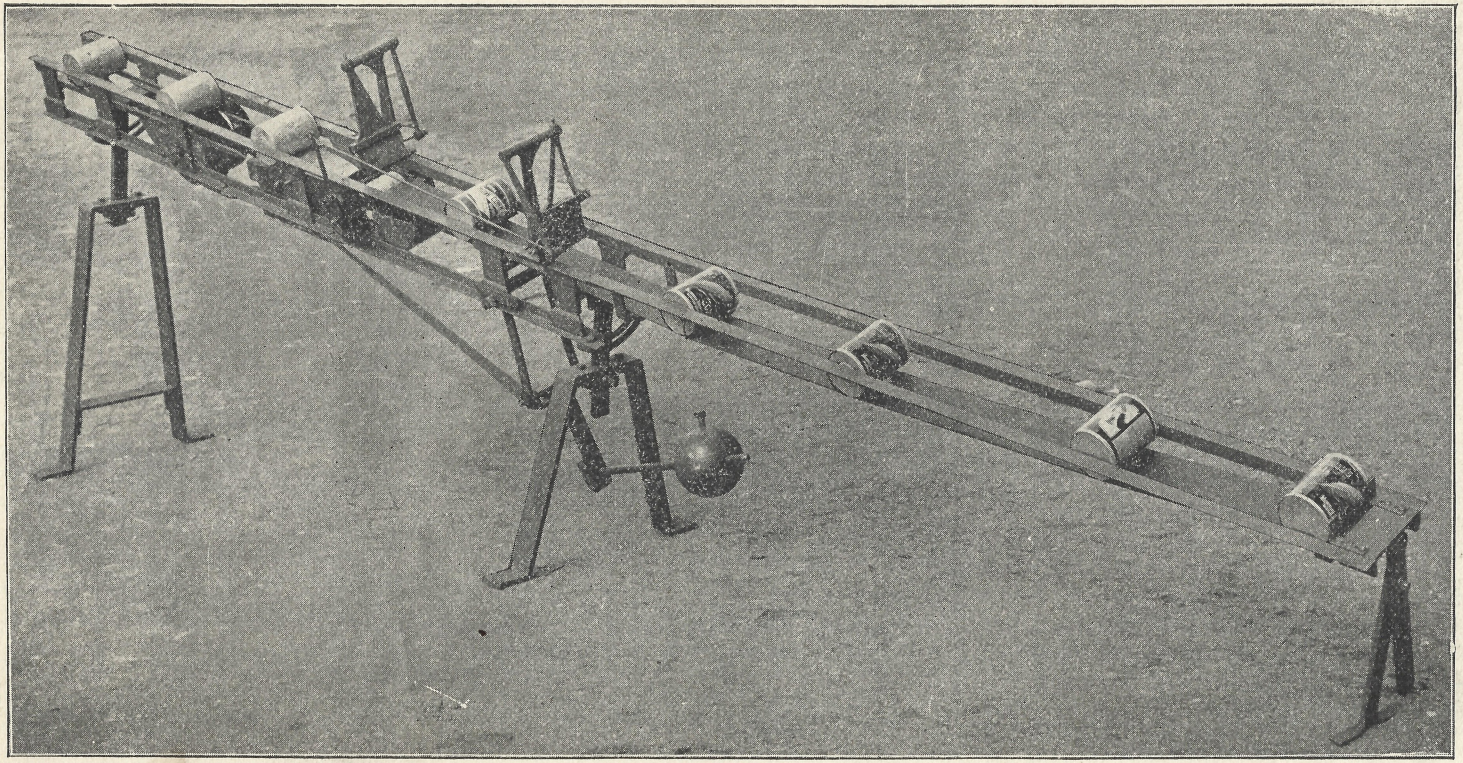
One not in a position to know would be surprised to find that our ordinary country towns send $4,000 to $10,000 away annually for canned goods.

This is wrong; that hard-earned money should remain at home, and your factory should supply your home trade and sell yearly $20,000 to $50,000 worth of canned goods, thereby being producers instead of consumers, exporters instead of importers.

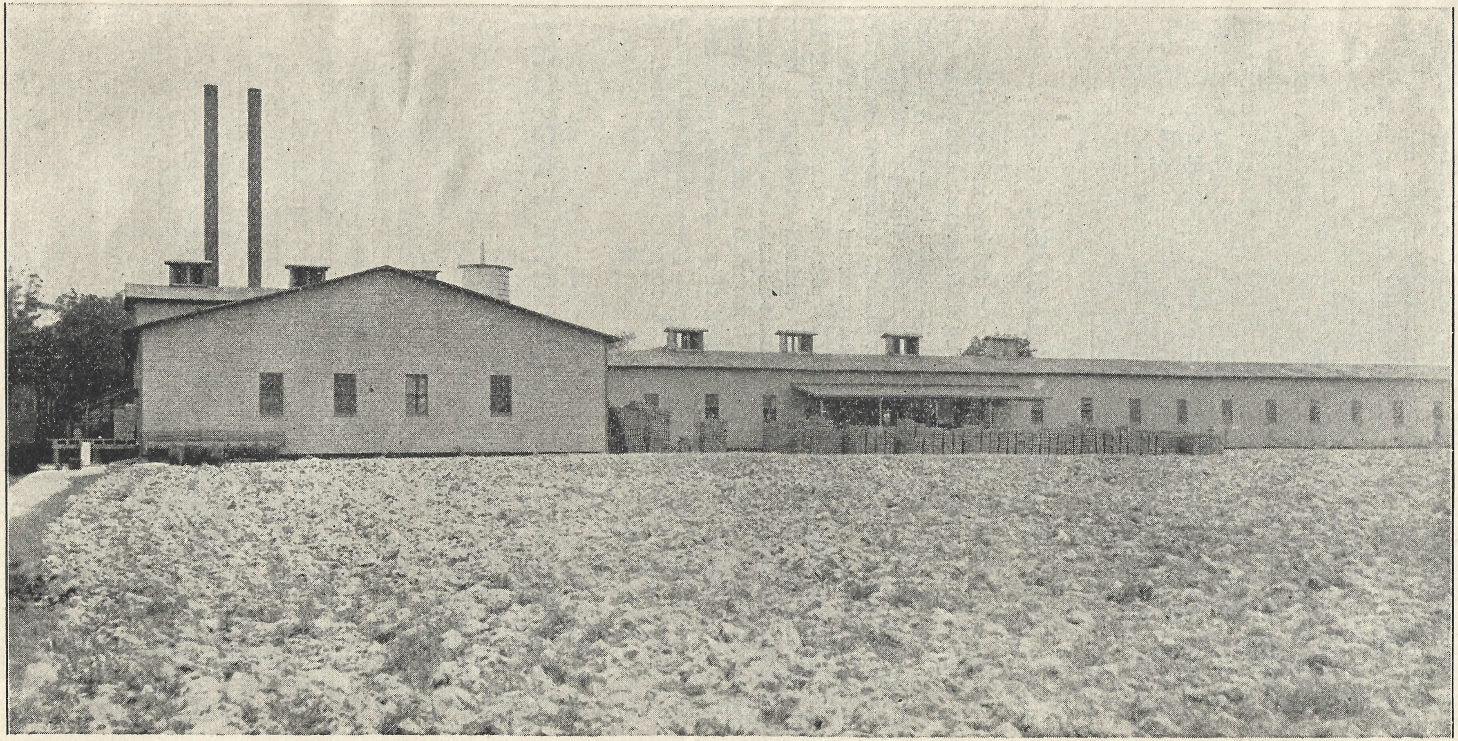
A good canning factory, under full headway, will use the produce of from 2,000 to 5,000 acres. The farmers and gardeners are paid weekly from $1,000 to $3,000. This money drifts into the hands of bankers, merchants and business men, thus enabling all persons connected with it, either directly or indirectly, to do a cash instead of a credit business.

The growers should bear in mind that the produce is raised and delivered, and money paid, all in about 120 days, not toiling and waiting twelve months under summer's burning suns and winter's chilling blasts.

Imagine your condition when fully equipped and under headway, employing and giving assistance to hundreds of poor people, who are anxious to work could they only obtain the much needed employment; you become a public benefactor. No richer, fairer, or lovelier prospect unfolds itself to the admiring eye than a country clothed in verdure, bathed in sunlight and dotted here and there with factories of various kinds, with their tall smokestacks



NATIONAL LABELING MACHINE.



A CANNING FACTORY PLANT.

pointing heavenward; such will be yours if you lay aside procrastination, the thief of time.

We have shown the benefits derived by the farming community, merchants, and in fact everyone; now we will say to the owners and stockholders, that this is a good business as an investment if judiciously managed. The produce is all bought by weight, and the various work in packing the goods is done by the piece, so you can usually tell the number of bushels packed, the number of dozens, the cost per dozen, and the difference between your cost and the market price is your profit. You have your business always before you and can tell weekly how you stand with the world. We will furnish you an experienced man the first season, at a reasonable price, if so desired.

A GREAT LUXURY

What a luxury to have on our tables in the midst of winter the various fruits and vegetables, retaining all the richness and flavor of their natural state! Each year has marked some improvement in the method of preparing the different varieties of food for canning, until now, with the various appliances and improved machinery at command, the careful packer is enabled to preserve each article in hermetically sealed cans, to be opened months or even years afterwards, as rich and luscious as when first packed. Thus has the canning industry become one of the greatest of the country, employing tens of thousands of hands and giving to the world food in convenient packages, which may be transported to the most remote corners of the globe.

HOW TO GET A CANNING FACTORY

Well, now, what do you propose doing? Simply this, if you want a good canning factory, and will pay for it, we will come in your midst and put up a good factory, provide everything, and not ask one dollar in money until same is built and ready for operation. In this we will give you new, first-class improved machinery, everything complete, down to a pen, pencil and ink. We furnish everything but land and water, these we expect to have furnished by local parties. We could have written much more and colored it more elaborately, but we have endeavored to confine our remarks to unvarnished plain facts. Having had a long experience in this business we have a practical knowledge and know whereof we have spoken. Should you want a canning factory, or any information regarding the same, we will be glad to confer with you. In addition to our own make of machinery we represent, by specially favorable arrangement, the manufacturers of all other latest and most improved canning machinery built in the United States, and are in a position to fit out canning plants complete when desired.

OUR CONTINUOUS PROCESS

The preceding observations would be incomplete were we to omit calling especial attention to an invention that has taken the canning business out of the realms of speculation and placed it upon a secure and certain basis. We refer to what is known as the Continuous Process System for canning tomatoes and all kinds of fruits, a cut of which appears on last page. This machine has revolutionized the art of canning goods, and rendered apparent impossibilities easy to accomplish.

To fully describe the many advantages claimed for this new method would occupy much space, but a few comments on its merits will suffice to show its superiority over the old way of cooking and venting goods.

It having been demonstrated that the system of cooking canned goods by placing them in kettles filled with water, then forcing steam through the bottom of the kettle, did not bring about the desired results, we renewed our efforts to discover a safer, surer, better and more economical way of cooking and venting, and the culmination of our endeavors is the perfected process cooking machine which we are furnishing our customers this season, a picture of which appears on the last page.

There are many reasons why our new system is better than the old. In the first place, it obviates handling the cans so many times, and lessens the chances of their getting broken or indented, as often happens, by handling them with tongs, and placing them roughly into the huge crates used in the old cooking system. Again it is impossible to evenly cook the canned goods in the old style kettle, as those in the bottom next to the steam pipe are apt to be cooked too much long before those on top are sufficiently cooked.

No troubles of this kind can arise in our new method. The speed of the machine can be regulated at pleasure, and each can remains in exactly the same length of time, and passes through exactly the same temperature of steam and water. You regulate the machine, it does the rest. It never forgets, makes no mistakes, and works just as well without being watched.

As a labor-saving invention it is pre-eminently great. It virtually dispenses with all lifting, and no strong men are needed to operate cranes. Instead of crates weighing, when filled, several hundred pounds, the cans are handled in trays of twelve each, and these are seldom lifted, as wil be seen later.

As an economizer of time our new process machine has won great fame. It will easily double the capacity of any factory operated on the old system, and its gain in speed is really obtained by dispensing with the heavy work of handling the cans so many times.

The continuous process system insures the very best results, and without its advent the canning business could never have been such an assured and certain success.

It would be impossible for us to speak in terms of higher praise of this machine than others have. It has, with one

accord, been pronounced by all who have used it a grand success. The White Star Valley Canning Co., in a rccent letter to us, say, among other things: "Your new continuous process machine is the most complete system of processing fruits and vegetables ever yet invented. No clock to watch to see when your cans go in and when they shall come out. No blackboard and chalk needed for some one to keep time on, and no expert needed at from three to five dollars per day; no cans in the bottom to cook too much, and none on top to not cook enough. It simply moves right along, processing every can exactly alike, keeping its own time, and you simply put the trays on at one end of the machine and take them off at the other. In conclusion, will say that we labeled thirteen thousand cans before we found a bursted one, and no 'swells' to speak of, unless there was a defect in the cans."

Our new process machine can be used in connection with any kind of machinery to be found in factories equipped in the old style, but the entire outfit of a new plant should be up to date in every respect.

Drudgery in the canning factory is a thing of the past, and we now do by machinery nearly all that was formerly done by hand, thus saving work, avoiding mistakes and guaranteeing results.

Expenses are reduced to the minimum and profits are fixed and certain.

OUR NEW SCALDER

Our newly improved tomato scalder is a marvel, and cleans and scalds tomatoes to perfection. It is so nicely adjusted that the heavy particles of dirt sink to the bottom and the lighter particles rise to the top, thus leaving the tomatoes, between the two, thoroughly cleansed and perfectly scalded. A cut of this machine is shown on first page.

From the scalder they pass on to the revolving table where they are peeled, the skins being carried off in the refuse trough. The moving table carries the tomatoes on to the filling machine which puts them in the cans. It is not subject to mistakes like human hands, but does its work well and fills each can alike.

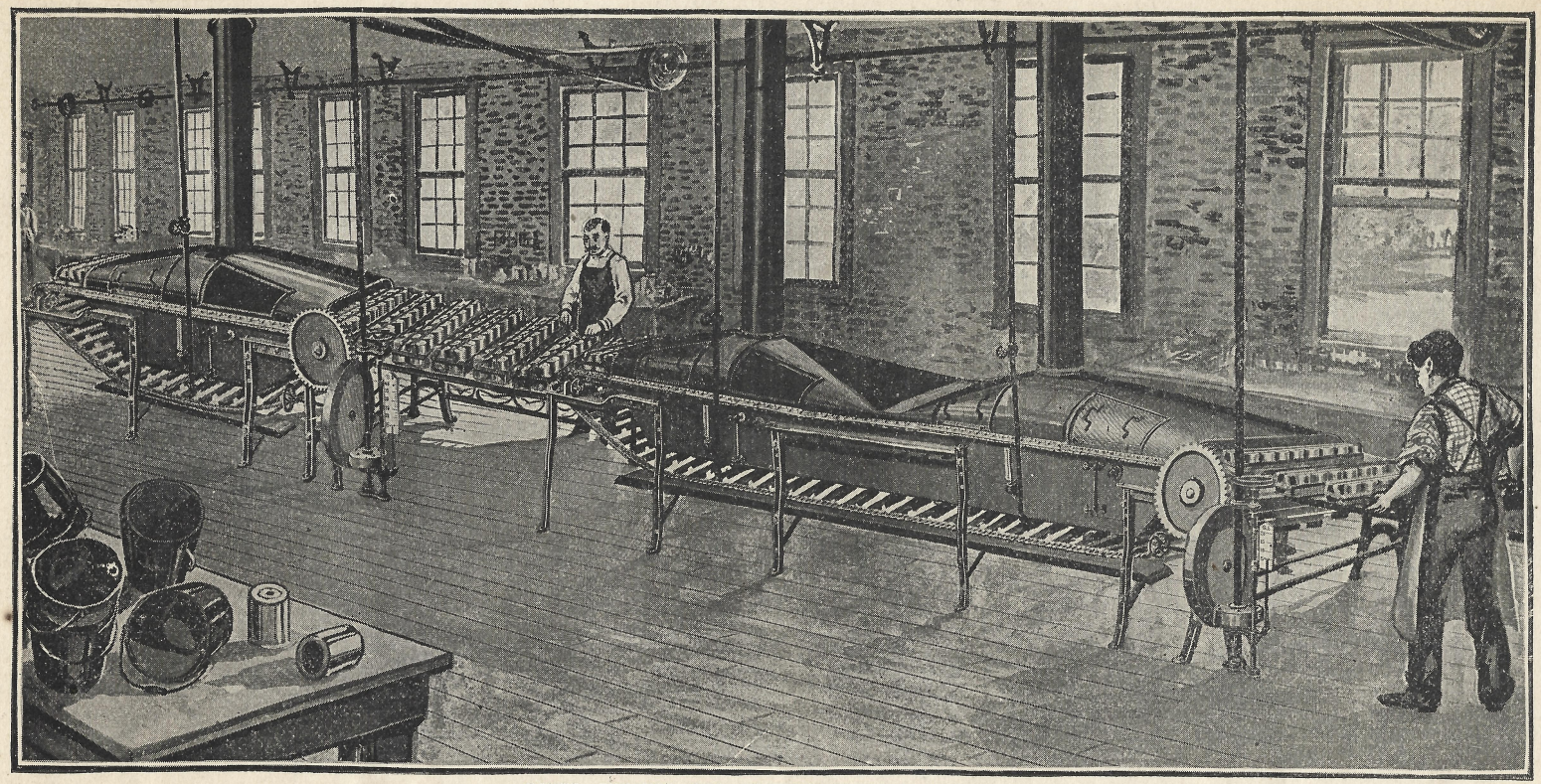
From here the filled cans pass to the capping machine, where, by a clever device they receive a sufficient amount of acid, and are then soldered twelve at a time, and in a much shorter period than it takes to tell it. From here they pass through our latest model exhaust machine, thence through the continuous cooker before described, and into the cooling tank, whence they are taken to a little machine that labels them as fast as one person can roll the cans down an incline. They are then ready to box, and we next see them on the shelves in the progressive merchant's store.

COST AND CAPACITY

The question will naturally occur to your minds as to what a canning factory will cost. We answer, it will depend largely on the size of your building and amount and quality of machinery wanted and locality, as some sections are much better adapted to certain kinds of fruits and vegetables than others. Then another question presents itself, how many months in a year can we run? We will answer this by saying about twelve months at one thing or another. In May and June you should commence on berries, peas and beans; July on corn; August, September and October on tomatoes; November and December in shipping out your goods. Then in January, February and March you should be making your cans for another year, and in April you should make your cases and overlook your building and machinery to see that it is in proper shape for commencing on your fruit and berries. A factory should be built by the producers, so they can derive good pay for their products, as well as getting their share of the profits of the factory.

DO YOU WANT A CANNING FACTORY

If so, you want the latest improved machinery, and this you can obtain only through us. We are the sole owners of the above mentioned machines, and, for this reason, we are anxious to introduce them and are prepared to quote prices, either on a factory complete or on separate machines of every description, at the lowest possible figures consistent with first-class workmanship.



BAKER EXHAUST AND COOKING PROCESS MACHINE.